

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009680**Date Inspected:** 11-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** ZPMC and ABF**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. Wai Pau, was present during the times noted above for observations relative to the work being performed.

**Bay #1**

Counter weight box: - Caltrans QA inspector observed two ZPMC workers and one tack weld welder performed fit up and SMAW tack weld process on the base plates of counter weight box CW-92 and CW-86. A numerous temporary tack welds have been welded attach to the two plates after adjusted and secured by hand jack and clamps. The fit up and SMAW tack welding process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observation, no discrepancies were noted.

**Bay #2**

Floor beam type 1:- Caltrans QA inspector observed one ZPMC welders performed FCAW fillet weld process on stiffeners for type-1 of floor beam #FB-6502-001. The fillet weld size is 6mm, 8mm and 10mm with single pass and multiple pass. The FCAW fillet welds process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Floor beam type 1:- Caltrans QA inspector observed one ZPMC welding operator performed semi-automatic FCAW fillet weld process on flange and stiffeners for type-1 of floor beam #FB-3037-001. The fillet weld size is 6mm with single pass. The semi-automatic FCAW fillet welds process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Floor beam type 3:- Caltrans QA inspector observed two ZPMC workers and two tack weld welders performed fit

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up and SMAW tack weld process on the stiffeners of floor beam type 3 ID# FB 3054-001 and FB3056-001. A numerous temporary tack welds have been welded attach to the stiffeners after pre heat completed on the tack weld areas. The fit up and SMAW tack welding process were monitored and recorded by ZPMC and ABF QC inspector. Base on Caltrans QAI observation, no discrepancies were noted.

### Bay#5

Traveler rails type TR10:- Caltrans QA inspector observed two ZPMC welders performed FCAW process on the flange to web plate of traveler rail #10TK3-008 and 10TK3-014. This type component designed has CJP and PJP weld along on one side of full weld length and other side has CJP only. The FCAW process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Traveler rails type TR10:- Caltrans QA inspector observed two ZPMC workers and one tack weld welder performed fit up and SMAW tack weld process on the flange to web plate of six traveler rails type TR10. A numerous temporary tack welds have been welded attach to the stiffeners after pre heat completed on the tack weld areas. The fit up and SMAW tack welding process were monitored and recorded by ZPMC and ABF QC inspector. Base on Caltrans QAI observation, no discrepancies were noted.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

As notes within report above.



Pre heat the stiffener of floor beam prior tack welding



Fit up and tack welding on counter weight box



FCAW process on the flange to web plate of traveler rail



Semi-automatic FCAW fillet weld process on flange and stiffeners for type-1 of floor beam

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### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Pau, Wai	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford, William	QA Reviewer

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